

mm



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/857,273	05/16/1997	PETER A. RONZANI	KPN93-09ACAF	3991

21005 7590 11/17/2004

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.
530 VIRGINIA ROAD
P.O. BOX 9133
CONCORD, MA 01742-9133

EXAMINER

WU, XIAO MIN

ART UNIT	PAPER NUMBER
----------	--------------

2674

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 08/857,273	Applicant(s) RONZANI ET AL.	
	Examiner XIAO M. WU	Art Unit 2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21, 23-29, 32-36, 38-40, 42-48, 51-55, 57-59, 61, 63, 71-82 and 84-113 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 23-29, 32-36, 38-40, 42-48, 51-55, 57-59, 61, 63, 71-82 and 84-113 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 21, 23-29, 32-36, 38-40, 42-48, 51-55, 57-59, 61, 63, 71-82, 84-85, 87-89, 91-93, 95-106, 108-113 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoolman (U.S. Patent No. 5,281,957) in view of Ohnsorge (U.S. Patent No. 5,485,504), Spitzer (WO 93/18428) and Nathanson (U.S. Patent No. 4,010,322).

Schoolman discloses a portable communication device (or a telephone housing) comprising: a telephone housing (Fig. 4); a central processing unit (71, Fig. 10); a receiver (54) within the housing that receives image data; a liquid crystal display (44, 45); a display driver (3); a lens (33, 34) that enlarges an image displayed on the display for viewing by a user; and a display control (3).

It is noted that Schoolman fails to disclose that a central processing mounted within the housing and a wireless transceiver within the telephone housing for transmitting and receiving audio and a wireless receiver within the telephone housing that receives image. Schoolman also fails to disclose the liquid crystal display having an active matrix circuit including an array transistors and an array of pixel electrodes such that the active matrix circuit is bonded to an

Art Unit: 2674

optically transmissive substrate with an adhesive layer. It is also noted that Schoolman fails to disclose a battery carried by the telephone housing for powering the transceiver, the receiver, the display, the light source, and the circuit.

Ohnsorge is cited to teach a telephone device which comprises circuitry (CPU) and a wireless transceiver within the telephone housing for transmitting and receiving audio and a wireless receiver within the telephone housing that receives image data.

Spitzer is cited to teach an active matrix display with red, green and blue backlight sources for a head-mounted display system similar to applicant.

Nathanson is cited to teach a portable telecommunicator device which comprises a power supply (30) for powering the display, transceiver, receiver, light source and circuit within the housing.

It would have been obvious to one of ordinary skill in the art to have modified Schoolman with the features of combining a central processing unit and audio wireless transceiver and a wireless image data receiver within the same housing as taught by Ohnsorge, because the wireless device of Ohnsorge can provide a mobile communication to the user.

Also, it would have been obvious to one of ordinary skill in the art to have used an active matrix liquid crystal of Spitzer for the liquid crystal display of Schoolman because the active matrix liquid crystal display can provide sharper image than the regular liquid crystal display (e.g. passive type LCD).

Furthermore, it would have been obvious to one of ordinary skill in the art to use an internal power source within the housing as taught by Nathanson so as to provide a mobile function of the telephone unit.

Art Unit: 2674

With respect to the newly added claims 87-89, 91-93, 95-97, it would have been obvious to have used different kinds of sensors in the head-mounted display device of Schoolman as modified because they can provide work related data to the user.

With respect to newly added claims 110-111, Schoolman discloses that the display panel and the lens are housed with a display module attached to the housing.

With respect to the newly added claims 112-113, Schoolman as modified by Spitzer would provided the additional light within the housing for backlighting the LCD display panel.

3. Claims 86, 90, 94 and 107 are re rejected under 35 U.S.C. 103(a) as being unpatentable over Schoolman (U.S. Patent No. 5,281,957) in view of Ohnsorge (U.S. Patent No. 5,485,504), Spitzer (WO 93/18428) and Nathanson (U.S. Patent No. 4,010,322) as applied to claims 21-29, 31-36, 38-48, 50-55, 57-59, 61, 63, 71-82, 84-106 above, and further in view of Suzuki (EPA 0 551 781 A1).

It is noted that Schoolman, Ohnsorge, Spitzer and Nathanson do not disclose a servo for allowing adjustment of the position of the display relative to a user eyes. Suzuki is cited to teach a head mounted display device similar to Schoolman. Suzuki discloses a servo (\$, Fig. 1) for allowing adjustment of the position of the display relative to a user's eyes. It would have been obvious to one of ordinary skill in the art to have modified Schoolman as modified with the features of the servo as taught by Suzuki because Suzuki's head mounted display can be fitted into different users.

Response to Arguments

Art Unit: 2674

4. Applicant's arguments filed 7/28/2004 have been fully considered but they are not persuasive.

Applicant argues that there is no suggestion in the art to incorporate the electronics of Ohusorge's hand-held device into the head-mounted structure of Schoolman. This argument is not persuasive because Ohnsorge is cited to teach a telephone device similar to Schoolman, which comprises circuitry (CPU) and a wireless transceiver within the telephone housing for transmitting and receiving audio and a wireless receiver within the telephone housing that receives image data. It would have been obvious to have modified the head-mounted display of Schoolman with the features of the wireless audio transceiver and video receiver as taught by Ohnsorge so as to provide a portable wireless communication device. It is believed that the claimed structures are still met by the combination of the prior art references.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2674

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiao Wu whose telephone number is (703) 305-4721.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard Hjerpe**, can be reached on (703) 305-4709.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:


(703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377

xw

November 14, 2004


XIAO WU
PRIMARY EXAMINER
ART UNIT 2674